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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,471

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Frank J. M. Benschop

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

595 MINER ROAD

CLEVELAND, OH 44143

EXAMINER

BOR, HELENE CATHERINE

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

11/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,471

Applicant(s)

BENSCHOP ET AL.

Examiner

Helene Bor

Art Unit

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

The examiner recognizes the amendments to claims 1, 3, 4, 6 & 9 and the newly added claims 10 -13. Thus under examination are the original, amended and new claims 1-13.

Response to Arguments

1. Applicant's corrections filed 09/12/2007 regarding the specification corrections are accepted. The objections to the specification are withdrawn.
2. Applicant's arguments filed 09/12/2007 have been fully considered but they are not persuasive. The applicant argued that the image planning system of Suzuki does not operate during the execution of the operational items, does not control the execution of operational items and cannot issue instructions. The examiner respectfully disagrees. The image planning system of Suzuki does in fact operate during the execution of the operational items as the plan developed is executed during the imaging process. The purpose of the imaging plan of Suzuki is to implement it. As Suzuki states, "an imaging planning program which is a program for carrying out the above-mentioned imaging plan is stored in the subsidiary memory unit" (Page 4, Para 0050). The image planning system of Suzuki does control the execution of operational items. As Suzuki states, "...the operator sets up the imaging plan (schedule). According to the set-up schedule the host controller controls the gantry and the bed to perform the schedule one by one" (Page 6, Para 0067). The image planning system of Suzuki does issue instructions. First, the language in Claim 1 states, "progress information" and not "progress instructions". The image planning system of Suzuki does provide the user information regarding the state of the imaging process. As Suzuki states, "...the

updated information is automatically displayed" (Page 9, Para 0096). However, claim 6 does claim "instructions". The examiner contends that the imaging system does provide "priority instructions" (Page 6, Para 0067-0068) to the operator. Thus the 35 USC § 102(b) rejection of claims 1-2 & 4-7 is maintained.

3. Applicant's arguments with respect to claim 9, 3 & 8 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 7, the phrase "such as" or "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1-2 & 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US Patent Application No. 2003/0123603 A1).

Claim 1 & 6: Suzuki teaches a control system to control the execution of operational items by the diagnostic imaging system (Page 2, Para 0013) on the basis of an execution list (Figure 4). Suzuki teaches a user interface coupled to the control system, the user interface including a scheduler module which generates an ordered selection of operational items (Page 2, Para 0012). Suzuki teaches wherein the control system controls the execution of operational items on the basis of an execution list (Page 6, 0069 & 0070) and the scheduler releases operational items according to the ordered selection (Page 9, Para 0096). Suzuki teaches a diagnostic imaging system, wherein the scheduler module is arranged to provide progress information or instructions to the user interface, said progress information being related to the way the execution of operational items is advancing (Page 6, Para 0068 & 0070).

Claim 2: Suzuki teaches a diagnostic imaging system, wherein the operational items have respective parameter settings (Figure 4) and the scheduler module is set up to form the ordered selection of operational items on the basis of their respective parameter settings (Page 5, Para 0066 & Page 8, Para 0082).

Claim 4: Suzuki teaches a diagnostic imaging system, wherein the scheduler releases operational items in dependence of successful completion of preceding operational items of the ordered selection (Page 9, Para 0096).

Claim 5: Suzuki'603 teaches a diagnostic imaging system, wherein the scheduler module is provided with a memory (Page 4, Para 0050), in particular a database with a browser (Figure 4), to store scan schedules.

Claim 7: Suzuki'603 teaches a diagnostic imaging system, wherein the scheduler module is arranged to make available to the user interface a description of the operational item, in particular in dependence of the operational item being released to the execution list (Page 9, Para 0096).

8. Claim 1, 6 & 10-11 rejected under 35 U.S.C. 102(b) as being anticipated by Banks et al (US Patent No. 6,603,494 B1).

Claim 1 & 6: Banks teaches a control system to control (Figure 1, Element 190) the execution of operational items (Figure 5, Element 290) by the diagnostic imaging system on the basis of an execution list (Figure 5, Element 278). Bank teaches a user interface (Figure 1, Element 100) coupled to the control system, the user interface including a scheduler module (Figure 3, Element 230) which generates an ordered selection of operational items. Bank teaches wherein the control system controls the execution of operational items on the basis of an execution list (Figure 5, Element 278 & 290) and the scheduler releases operational items according to the ordered selection (Figure 2, Element 208). Bank teaches a diagnostic imaging system, wherein the scheduler module is arranged to provide progress information or instructions to the user interface, said progress information being related to the way the execution of operational items is advancing (Col. 9, Line 34-39).

Claim 10 & 11: Banks teaches the diagnostic imaging system, wherein the diagnostic imaging system is a magnetic resonance imaging system (Figure 1, Element 141).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 9, 3, 8 & 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent No. 2003/0123603 A1) as applied to claim 1-2 & 4-7 above, and further in view of Banks et al. (US Patent No. 6,603,494 B1).

Claim 9: Suzuki teaches a control system to control the execution of operational items (Page 2, Para 0013). Suzuki teaches a user interface coupled to the control system, the user interface including a scheduler module which generates an ordered selection of operational items (Page 2, Para 0012). Suzuki teaches a diagnostic imaging system, with a displaceable patient support [bed] wherein the control system [bed control unit] is set up to displace the patient support [bed] among various imaging positions (Page 3, Para 0042). Suzuki teaches conducting several imaging sequences at individual imaging positions and to alternate performance of the several imaging sequences with

the displacement of the patient support among the various imaging positions (Page 6, Para 0067). Suzuki fails to teach the use of a magnetic resonance imaging system and different magnetic resonance imaging sequences such that the different magnetic sequences at individual imaging position share the same geometry. However, Banks teaches the use of magnetic resonance imaging system (Figure 1, Element 141) for guiding technologist on different imaging modalities (Col. 6, Line 27-29). It would have been obvious to modify the system of Suzuki to include an alternative imaging modality such as magnetic resonance imaging system as taught by Banks since Banks is teaching a user interface for guiding technologist on different imaging modalities (Col. 6, Line 27-29). Banks also teaches different magnetic resonance imaging sequences such that the different magnetic sequences at individual imaging position share the same geometry (Figure 2, Element 202, 210 & 212) to guide the technologist through a properly orchestrated imaging protocol (Col. 9, Line 61-65). It would have been obvious to one of ordinary skill in the art to modify the system of Suzuki to include the different imaging sequences at individual positions share the same geometry as taught by Banks in order to guide the technologist through a properly orchestrated imaging protocol (Col. 9, Line 61-65).

Claim 3: Suzuki teaches wherein the control system controls the execution of operational items on the basis of an execution list (Page 6, 0069) and the scheduler releases operational items according to the ordered selection (Page 9, Para 0096).

Claim 8: Suzuki teaches a diagnostic imaging system, wherein the scheduler module is arranged to provide progress information to the user interface, said progress information

being related to the way the execution of operational items is advancing (Page 6, Para 0068 & 0070).

Claim 12 & 13: Suzuki teaches a diagnostic imaging system, wherein the scheduler module is arranged to provide progress information or instructions to the user interface, said progress information being related to the way the execution of operational items is advancing (Page 6, Para 0068 & 0070). Suzuki does not teach the issue of the specific instruction of applying a surface RF coil because the system of Suzuki is directed to a tomography apparatus. Also Suzuki does not teach issuing instructions calling for the infusion of contrast agent. However, Banks teaches modality guidance tools which determine information should be provided to a technologist during an imaging session to guide a technologist through a properly orchestrated imaging protocol (Col. 9, Line 34-39 & 61-65). Thus it would have been obvious to one of ordinary skill in the art to modify the system of Suzuki to include the guidance system of Banks which is capable of providing protocol instructions, such as when to inject the contrast agent and when to apply the RF coil, in order to guide a technologist through a properly orchestrated imaging protocol (Col. 9, Line 61-65).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Bor whose telephone number is 571-272-2947. The examiner can normally be reached on M-T 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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hcb

 ERIC F. WINAKUR
PRIMARY EXAMINER